

REMARKS**Status of the Claims**

Claims 1-20 are currently present in the Application, and claims 1, 8, and 14 are independent claims. Claims 8-20 have been amended in order to remove "means plus function" limitations and, in the case of claims 14 and 20, to address § 101 rejections and § 112 rejections, respectively. No claims have been cancelled or added in this Response.

Examiner Interview

Applicants note with appreciation the Examiner Interview conducted between Applicants' undersigned attorney and Examiner Yaary on July 18, 2007. During the interview, Applicants' attorney noted that the secondary reference (U.S. Patent No. 6,338,159 to Alexander, III et al. (hereinafter "Alexander")) does not teach tracing code when a lock is unavailable and the Examiner agreed. The Examiner and Applicants' attorney discussed language to clarify the "emitting" limitation found in the independent claims, and the Examiner agreed that this minor clarifying amendment would not result in a final rejection if a new search revealed other art that might better teach or suggest Applicants' claimed invention.

Drawings

Applicants note with appreciation the acceptance, by the Examiner, of Applicants' formal drawings that were submitted with the original Application.

Claim Rejections Under 35 U.S.C. § 101

Claims 14-20 were rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. Applicants have amended claim 14, upon which claims 15-20 depend, in accordance with the suggestion of the Examiner making it clear that the software resides on a storage media. Consequently, Applicants respectfully request that the rejection of these claims under § 101 be withdrawn.

Claim Rejections Under 35 U.S.C. § 112

Claim 20 was rejected under § 112 as being unclear as to the subject matter being claimed. Applicants note that the Examiner's assumption that claim 20 was supposed to depend on claim 19 is correct and Applicants have amended the claim so that it now depends on claim 20. Applicants appreciate the Examiner bringing this typographical error to Applicants' attention. Claim 20 has been amended so that it now depends on claim 19. Consequently, Applicants respectfully request that the rejection of these claims under § 112 be withdrawn.

Claim Rejections – Alleged Obviousness Under 35 U.S.C. § 103

▪ **Claims 1, 4, 5, 8, 11, 14, 17, and 18 - Sadjadi in view of Alexander**

Claims 1, 4, 5, 8, 11, 14, 17, and 18 stand rejected under 35 U.S.C. § 103 as allegedly being obvious, and therefore unpatentable, over U.S. Patent No. 6,850,938 to Shahrokh Sadjadi (hereinafter "Sadjadi") in view of U.S. Patent No. 6,338,159 to Alexander, III et al. (hereinafter "Alexander"). Applicants respectfully traverse the rejections.

MPEP § 2143 provides that, in order to establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Applicants respectfully submit that Sadjadi in view of Alexander fails to teach or suggest all of Applicants' claim elements as set forth in the independent claims.

As an exemplary independent claim, claim 1 is a method claim that includes limitations of:

- receiving requests for a shared resource, wherein access to the shared resource is controlled with a software lock;

- detecting that the software lock is unavailable;
- executing an operating system trace hook in response to the detecting, wherein the operating system trace hook is records lock usage data; and
- analyzing the recorded lock usage data.

The Office Action admits that Sadjadi does not teach or suggest Applicants' limitation of "executing [emitting] an operating system trace hook in response to the detecting, wherein the operating system trace hook is records lock usage data" and relies upon Alexander as teaching this limitation. However, as will be explained in detail below, the Office Action's reliance on Alexander for this limitation is misplaced.

Applicants' "emitting..." limitation is performed in response to detecting that a "software lock is unavailable." While Alexander does teach a system and method of providing trace information (see title, abstract, etc.), Alexander simply does not teach or suggest emitting a trace hook in response to detecting that a software lock is unavailable. Analyzing the sections cited in the Office Action, as well as the rest of the Alexander reference, reveals that the only time that Alexander references using a trace tool in conjunction with a software lock, Alexander teaches logging the acquisition and release of software locks, and does not teach tracing or logging anything when the software lock is unavailable. Specifically, in the paragraph that begins at col. 1, line 44, Alexander teaches (with emphasis added):

One type of prior art software performance tool, referred to as a trace tool, keeps track of particular sequences of instructions by logging certain events as they occur. For example, a trace tool may log every entry into and every exit from a module, subroutine, method, function, or system component. Typically, a time stamped record is produced for each such event. **Pairs of records similar to entry-exit records are also used to trace execution of arbitrary code segments, to record acquiring and releasing locks,** starting and completing I/O or data transmission, and for many other events of interest.

In sharp contrast to the teachings of Sadjadi combined with those of Alexander, Applicants claim "emitting an operating system trace hook in response to the

detecting..." where the "detecting" is "detecting that the software lock is unavailable." This limitation is found in each of Applicants' independent claims (claims 1, 8, and 14). Consequently, the Office Action fails to establish a *prima facie* case of obviousness in rejecting Applicants' claims as Sadjadi in view of Alexander simply does not teach or suggest each of Applicants' claimed limitations. Therefore, each of Applicants' independent claims are allowable over the combination of Sadjadi in view of Alexander. Each of the remaining claims (claims 2-7, 9-13, and 15-20) depends, directly or indirectly, on one of the independent claims and, therefore is also allowable for at least the same reasons that the independent claims are allowable.

▪ **Claims 2, 3, 9, 10, 15, and 15 - Sadjadi in view of Alexander in view of Joy**

Claims 2, 3, 9, 10, 15, and 15 stand rejected under 35 U.S.C. § 103 as allegedly being obvious, and therefore unpatentable, over Sadjadi in view of Alexander in further view of U.S. Patent No. 5,968,157 to Joy et al. (hereinafter "Joy"). Applicants respectfully traverse the rejections.

▪ **Claims 6, 12, and 19 – Sadjadi, Alexander, Joy, and Barton**

Claims 6, 12, and 19 stand rejected under 35 U.S.C. § 103 as allegedly being obvious, and therefore unpatentable, over Sadjadi in view of Alexander in further view of Joy in further view of U.S. Patent No. 5,502,840 to Richard R. Barton (hereinafter "Barton"). Applicants respectfully traverse the rejections.

Conclusion

As a result of the foregoing, it is asserted by Applicants that the remaining claims in the Application are in condition for allowance, and Applicants respectfully request an early allowance of such claims.

Applicants respectfully request that the Examiner contact the Applicants' attorney listed below if the Examiner believes that such a discussion would be helpful in resolving any remaining questions or issues related to this Application.

Respectfully submitted,

By /Leslie A. Van Leeuwen, Reg. No. 42,196/
/Joseph T. Van Leeuwen, Reg. No. 44,383/

Leslie A. Van Leeuwen, Reg. No. 42,196
Joseph T. Van Leeuwen, Reg. No. 44,383
Van Leeuwen & Van Leeuwen
Attorneys for Applicant
Telephone: (512) 301-6738
Facsimile: (512) 301-6742